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(for all correspondence after initial filing)

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Application Number 09/932,433	er
Filing Date 8/18/2001	
First Named Invent MURALI CHAPARAL	tor ET AL.
Group Art UnOit 2882	
Examiner	

 	ENCLOSURES (check all that apply)			
11.1	Return Receipt Postcard (MPEP 503)	[] Response to Notice of Missing Parts		
[1]	Fee Transmittal Form	[] Applicant Claims Small Entity Status		
	[] Fee Attached	[] Declaration by Inventors		
[X]	Response/Amendment	[] Assignment papers		
	[] After Final Rejection	Power of Attorney by Assignee		
٠.	[] After Allowance communication to Group] IDS/PTO-1449		
	[] with Corrected Drawing(s) Total Sheets: [] [] with Affidavits/Declarations	[] with copies of cited references		
[]	Extension of Time Request	[] New Power of Attorney and Revocation of Old		
[-]	Express Abandonment Request	[] Change of Correspondence Address [X] Other: Corrected Amendments to Claims		
		including status of cancelled claims 1-25 (2 pages)		
•.				

SIGNATURE OF ATTORNEY				
NAME	JOSHUA D. ISENBERG,	REG. NO. 41.08	8	
Signature Date	Joshun D	Jamley		
Dale		0	5/24/2004	
	Certinica	te of Transmissio	n under 37 CFR 1.8	
States Pa	ertify that this correspondent and Trademark Of	псе (ng facsimile transmitted to the United	
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Appl. No. 09/932,433 Amdt. Dated May 12, 2004

Attorney Docket No.: ONX-115A/DIV Reply to Office Action of Dec. 24, 2003

COMPLETE LISTING OF ALL CLAIMS

Kindly amend claim 26 as shown in the listing of claims below. This listing of claims will replace all prior versions, and listings of claims in the application.

- 1 1-26. (cancel)
- 26. (currently amended) A method for operating a MEMS device having a flap that is
- 2 movable with respect to a base, the method comprising:
- applying a pre-bias force to the flap to move the flap at least partially out of contact with
- an underlying base, wherein the pre-bias force is separate from a force that actuates the
- 5 <u>flap</u>.
- 6 27. (original) The method of claim 26, wherein the force produces a biasing torque on the flap to reduce stiction and improve reliability.
- 9 28. (original) The method of claim 26, wherein the force produces a biasing torque on the flap to increase switch reliability.
- 29. (original) The method of claim 26 wherein the force is applied by a biasing element chosen from the group consisting of a fixed magnet, current carrying coils, flap torsion springs, magnetic materials, gap-closing electrodes, spring loaded elements, stress bearing
- materials, piezoelectric elements and thermal bimorph actuators.
- 30. (original) The method of claim 26 wherein the force produces a biasing torque on the flap.
- 31. (original) The method of claim 30 wherein the biasing torque tends to counteract another torque exerted on the flap.
- 1 32. (original) A microelectromechanical apparatus comprising:
- 2 a base;
- a flap having a portion coupled to the base so that the flap is movable out of the plane of the base from a first angular orientation to a second angular orientation;
- wherein the base has an opening that receives the flap when the flap is in the second angular orientation, the opening having one or more sidewalls, wherein at least one of the

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- sidewalls contacts a portion of the flap such that the flap assumes an orientation substantially parallel to that of the sidewall when the flap is in the second angular orientation;
- a sidewall electrode disposed in one or more of the sidewalls and
- means for applying a pre-bias force to the flap to move the flap at least partially out of contact with an underlying base.
- 33. (original) The apparatus of claim 32 wherein the means for applying a force applies a fixed force to the flap.
- 34. (original) The apparatus of claim 32 wherein the means for applying a force is a biasing element chosen from the group consisting of flap torsion springs, magnetic materials, current carrying coils, gap-closing electrodes, spring loaded elements, stress bearing materials, piezoelectric elements and thermal bimorph actuators.
- 35. (original) The apparatus of claim 32 wherein the means for applying a force produces a biasing torque on the flap.
- 36. (original) The apparatus of claim 35 wherein the biasing torque tends to counteract another torque exerted on the flap.
- 37. (original) The apparatus of claims 32 where the base is made from a substrate portion of an SOI (silicon-on-insulator) wafer and the flap is defined from a device layer portion of the SOI wafer.